

## ABSTRACT

A channel quality report accuracy measurement apparatus and accuracy measurement method are provided  
5 that correctly measure the accuracy of channel quality reported from a communication apparatus. A scheme control section (140) stores coding rates and modulation schemes corresponding to CQIs, and specifies the transmission scheme corresponding to a fixed CQI reported  
10 from a CQI statistical processing section (230). A CQI decoding section (220) decodes a reported CQI contained in a received signal. The CQI statistical processing section (230) performs statistical processing of reported CQIs corresponding to test data transmitted prior to an  
15 accuracy measurement test, and reports the most frequently reported CQI to the scheme control section (140) as a fixed CQI. A PER calculation section (260) calculates the PER in the communication apparatus from the reported CQI and Ack/Nack corresponding to test data  
20 transmitted in accordance with the fixed CQI. A determination section (270) performs threshold value determination for the PER for each reported CQI value, and outputs the reported CQI scheme determination result.

[FIG.1]

REPORTED CQI

[FIG.2]

- 5 100: TRANSMITTING SECTION
  - TEST DATA OR ACCURACY MEASUREMENT DATA
  - 110 CODING SECTION
  - 120 MODULATION SECTION
  - 130 RADIO TRANSMITTING SECTION
- 10 140 SCHEME CONTROL SECTION
  - 200: RECEIVING SECTION
    - 210 RADIO RECEIVING SECTION
    - 220 CQI DECODING SECTION
    - 230 CQI STATISTICAL PROCESSING SECTION
- 15 240 ACK DECODING SECTION
  - 250 ACK PROCESSING SECTION
  - 260 PER CALCULATION SECTION
  - 270 DETERMINATION SECTION
  - DETERMINATION RESULT
- 20 300 ANTENNA DUPLEXING SECTION

[FIG.3]

- 400 RADIO RECEIVING SECTION
- 410 CHANNEL QUALITY MEASUREMENT SECTION
- 25 420 CQI GENERATION SECTION
- 430 MULTIPLEXING SECTION
- 440 MODULATION SECTION
- 450 RADIO TRANSMITTING SECTION

## 460 ANTENNA DUPLEXING SECTION

RECEIVE DATA

TRANSMIT DATA

5 [FIG.4]

START

ST1000 CQI STATISTICS ACQUISITION

ST1100 TRANSMISSION METHOD SELECTION

ST1200 PER CALCULATION FOR EACH CQI

10 ST1300 PER CORRESPONDING TO FIXED CQI  $\leq$  THRESHOLD VALUE  
A?

ST1400 PER CORRESPONDING TO ONE LEVEL HIGHER CQI  $\leq$   
THRESHOLD VALUE B?

ST1500 PER CORRESPONDING TO ONE LEVEL LOWER CQI  $\geq$  THRESHOLD  
15 VALUE C?

END

(19) 世界知的所有権機関  
国際事務局



(43) 国際公開日  
2004年8月5日 (05.08.2004)

PCT

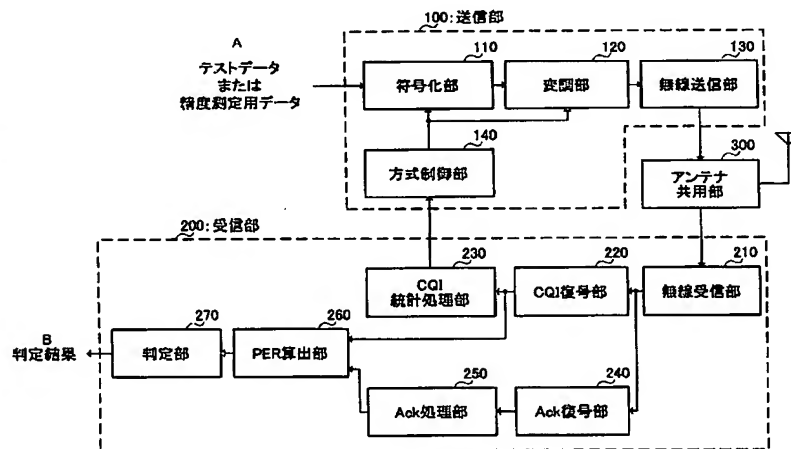
(10) 国際公開番号  
WO 2004/066547 A1

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(22) 国際出願日: 2003年12月12日 (12.12.2003)  
(25) 国際出願の言語: 日本語 (72) 発明者; および  
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(30) 優先権データ: 特願2003-16385 2003年1月24日 (24.01.2003) JP 横須賀市 光の丘6-2-803 Kanagawa (JP).

[続葉有]

(54) Title: LINE QUALITY REPORT ACCURACY MEASUREMENT DEVICE AND ACCURACY MEASUREMENT METHOD

(54) 発明の名称: 回線品質報告の精度測定装置および精度測定方法



A...TEST DATA OR ACCURACY MEASUREMENT DATA  
100...TRANSMISSION SECTION  
110...ENCODING SECTION  
120...MODULATION SECTION  
130...RADIO TRANSMISSION SECTION  
140...METHOD CONTROL SECTION  
300...ANTENNA SHARING SECTION  
200...RECEPTION SECTION  
B...JUDGMENT RESULT  
230...CQI STATISTIC PROCESSING SECTION  
220...CQI DECODING SECTION  
210...RADIO RECEPTION SECTION  
270...JUDGMENT SECTION  
260...PER CALCULATION SECTION  
250...Ack PROCESSING SECTION  
240...Ack DECODING SECTION

(57) Abstract: A line quality report accuracy measurement device and accuracy measurement method capable of accurately measuring the accuracy of line quality reported from a communication device. A method control section (140) contains an encoding ratio corresponding to the CQI and a modulation method and specifies a transmission method corresponding to the fixed CQI reported from a CQI statistic processing section (230). A CQI decoding section (220) decodes a report CQI contained in the reception signal. The CQI statistic processing section (230) statistically processes the report CQI corresponding to the test data transmitted prior to an accuracy measurement test and notifies the CQI which has been reported most frequently as a fixed CQI to the method control section (140). A PER calculation section (260) calculates PER in the communication device according to the report CQI and Ack/Nack corresponding to the test data transmitted in accordance with the fixed CQI. A judgment section (270) performs a threshold value judgment for PER for each report CQI value and outputs the judgment result of the accuracy of the report CQI.

(57) 要約: 通信装置から報告される回線品質の精度を正確に測定する回線品質報告の精度測定装置および精度測定方法。方式制御部 (140) は、CQIに対応する符号化率および変調方式を記憶しており、CQI統計処理部 (230) から通知される固定CQIに応じた送信方式を指定する。CQI復号部 (220) は、受信信号に含まれる報告CQIを復号する。CQI統計処理部 (230) は、精度測定試験に先立って送信されたテストデータに対応する報告CQIを統計処理し、最も頻繁に報告されたCQIを固定CQIとして方式制御部 (140) へ通知する。P

[続葉有]



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(81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB,  
BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE,  
DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM,  
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US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) 指定国 (広域): ARIPO 特許 (BW, GH, GM, KE, LS,  
MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア特  
許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッ  
パ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
TR), OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

添付公開書類:

— 国際調査報告書

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